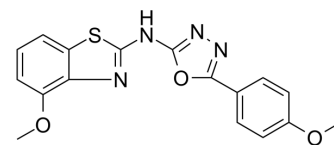


N106

Cat. No.:	HY-110273
CAS No.:	862974-25-2
Molecular Formula:	C ₁₇ H ₁₄ N ₄ O ₃ S
Molecular Weight:	354.38
Target:	Calcium Channel; E1/E2/E3 Enzyme
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling; Metabolic Enzyme/Protease
Storage:	Powder -20°C 3 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 62.5 mg/mL (176.36 mM); ultrasonic and warming and heat to 60°C)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	2.8218 mL	14.1091 mL	28.2183 mL
5 mM	0.5644 mL	2.8218 mL	5.6437 mL
10 mM	0.2822 mL	1.4109 mL	2.8218 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

N106 is a first-in-class sarcoplasmic reticulum calcium ATPase (SERCA2a) SUMOylation activator. N106 directly activates the SUMO-activating enzyme, E1 ligase. N106 can be used for heart failure research^[1].

In Vitro

N106 treatment increases contractile properties of cultured rat cardiomyocytes. N106 increases cell contractility, calcium-transient SERCA2a's ATPase activity and SUMOylation within 10 min of exposure, and these effects are sustained at 24 h in cardiomyocytes^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

In a murine model, the half-life of N106 is determined to be -65.4 min with a C_{max} of -2.24 μM when the mice received 10 mg/kg of N106 by intravenous injection. The oral bioavailability (F%) is 56% and 50%, and terminal elimination half-life (t_{1/2}) is 19 min^[1].

In vivo, N106 (10 mg/kg) increases cardiac SERCA2A SUMOylation, and significantly improves ventricular function in mice with heart failure^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Changwon Kho, et al. Small-molecule activation of SERCA2a SUMOylation for the treatment of heart failure. Nat Commun. 2015 Jun 12;6:7229.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA